

Ordinance No. \_\_\_\_\_

**AN ORDINANCE OF THE CITY OF BELMONT AMENDING CHAPTER 7 OF THE CODE OF THE CITY OF BELMONT; ADOPTING BY REFERENCE THE 2007 EDITION OF THE CALIFORNIA BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24 (CCR, T-24), STATE HOUSING LAW, THE CALIFORNIA CODE OF REGULATIONS, TITLE 25, DIVISION 1, CHAPTER 1, SUBCHAPTER 1, SECTION 32 (CCR, T-25), 2006 INTERNATIONAL EXISTING BUILDING CODE, 1997 UNIFORM ADMINISTRATIVE CODE, 1997 UNIFORM HOUSING CODE, AND 1997 UNIFORM CODE FOR THE ABATEMENT OF DANGEROUS BUILDINGS AND AMENDMENTS AND MODIFICATIONS THERETO**

IT IS ORDAINED by the Belmont City Council as follows:

**WHEREAS**, the State of California has adopted the 2007 edition of the California Building Standards Code, incorporating the 2006 International Building Code, Volumes 1 and 2, as published by the International Code Conference (ICC), 2006 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials (IAPMO), 2006 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials (IAPMO), 2005 National Electrical Code as published by the National Fire Protection Agency (NFPA), 1997 Uniform Housing Code, Chapters 4,5,6, and Sections 701.2 and 701.3, as published by the International Conference of Building Officials (ICBO), and 2006 International Existing Building Code as published by the International Code Conference (ICC) with amendments and modifications, and local jurisdictions are mandated to apply the standards set forth therein unless the jurisdiction has adopted more stringent codes; and

**WHEREAS**, the procedures set forth in the 1997 Uniform Code for the Abatement of Dangerous Buildings are the equivalent of the Housing and Community Development, Title 25 therefore the 1997 Uniform Code for the Abatement of Dangerous Buildings applies to all buildings within the City of Belmont.

**WHEREAS**, the previous editions of the California Building Codes and amendments and modifications thereto currently in force as part of Chapter 7 of the Belmont City Code will expire on December 31, 2007; and

**WHEREAS**, on January 1, 2008 certain City of Belmont Building Codes will default to the new California Building Codes without amendments and modifications unless amendments and modifications are affirmatively adopted; and

**WHEREAS**, adoption of the new Building Codes is a local goal through the Silicon Valley Uniform Code Adoption and Interpretation Program, a joint venture comprised of 28 cities to obtain local uniformity in the Building Code adoption process, and one in which the City of Belmont actively participates; and

**WHEREAS**, certain local geographic, topographic and/or climatic conditions, such as hillside construction, a corrosive water table along the bay shoreline, and dense vegetation are

unique to the City of Belmont and are not specifically addressed by the minimum requirements of the International Building Codes; and

**WHEREAS**, the proposed amendments and modifications to the new Building Codes address these unique conditions. Therefore, this council finds and declares it necessary to amend Article IV of Chapter 7 of the Belmont City Code by enacting this ordinance to preserve minimum health, safety and welfare standards due to local geologic, geographic and/or topographic conditions unique to the City of Belmont; and

Chapter 7 of the Belmont City Code is hereby amended to read as follows:

## **CHAPTER 7**

### **ARTICLE IV. CONSTRUCTION REGULATIONS**

#### **DIVISION 1. BUILDING CODE**

##### **Sec. 7-21. Adopted; exceptions; purposes for exceptions.**

7-21-01. Adopted.

The rules, regulations and requirements published by the International Code Council (ICC) under the title "2006 International Building Code Volume 1 & 2" and adopted as the "2007 California Building Code Volume 1 & 2" including Appendix Chapters I and State of California amendments thereto, are adopted as and for the rules, regulations and standards within this city as to all matters therein contained with the following amendments are hereby adopted and the following sections of Chapter 7 are amended. All other sections of Chapter 7 shall remain as previously adopted:

Sec. 7-21-02 Exceptions, is replaced in its entirety with the following.

Chapter 9 of the Building Code is amended to read as follows:

**Section 901.1 Scope.** Adding the following amendments:

The Fire Chief may require additional extinguishers, and/or extinguishers of different ratings for protection of special hazards or hazardous areas. Other ratings may be permitted if, in the opinion of the Fire Chief, they are better suited to the hazard to be protected.

**Section 903.1 Amended.** Section 903.2 of this code is deleted in its entirety and is replaced by the following sub-sections 903.2.1.1 and 903.2.1.2:

**903.2.1.1 New Construction.** When the provisions of Chapter 9 of the 2006 IFC with the 2007 State of California Fire Code Amendments do not mandate automatic fire sprinkler system protection, and when the following occupancies are of new construction and the total square footage of the new building exceeds **2,500 square feet** in size, or more than one-story in height, an automatic fire sprinkler system, shall be installed: Group A, Group B, Group E, (Non-public schools), Group F, Group H, Group I,

Group M, and Group S occupancies.

**903.2.1.2 Existing Construction.** An approved automatic fire sprinkler system shall be installed in all locations of existing Group A, Group B, Group E (Non-public schools), Group F, Group H, Group I, Group M, Group R Division 1 (Hotels & Motels, only) and Group S occupancies, when the total square footage of the existing building exceeds **2,500 square feet** in size, or is greater than one-story in height, and one or more of the following items apply:

- a. Change to a more hazardous use/occupancy.
- b. When the Fire Chief determines that an automatic sprinkler system is necessary due to emergency vehicle access, fire load, occupant load or some other reason that may hinder fire suppression efforts in the event of a fire.

**Section 903.2.7 Amended.** Section 903.2.7 of this code is deleted in its entirety and is replaced by the following Sub-sections 903.2.7.1 and 903.2.7.2:

**903.2.7.1 Group R, Division 1 and 2 Occupancies – New Construction.**

When the provisions of Part 9, Title 24, C.C.R, 2007 California Fire Code, Section 903 do not mandate automatic fire sprinkler system protection, an approved automatic fire sprinkler system shall be installed in all new Group R-1 and R-2 occupancies, when the total square footage including garages and carports, exceeds **2,500 square feet** in size, or one-story in height. Installation of the sprinkler system shall conform to NFPA Standard 13R if the residential building is four stories or less in height and with the following additional protection:

1. Sprinklers shall be installed throughout garages, open attached porches, carports, large under-floor spaces that are of combustible construction, and accessible for storage use.
2. Sprinklers shall be installed throughout attic areas.

**903.2.7.2(A) Group R, Division 3 Occupancies-Existing Construction.**

An approved automatic fire sprinkler system meeting the design criteria as stipulated in section 903 is required for existing Group R, Division 3 when the existing structure is demolished and is reconstructed to become a habitable space of **2500 square** feet or greater in size.

**Demolished and Reconstruction means:**

- 1) The building has been completely torn down to the foundation. The structure is being renovated and is made uninhabitable during said renovation or reconstruction. This includes the removal or inoperability of **any** or **all** of the utilities to the building for a period of time of more than twenty-four consecutive hours. **Utilities mean;** water, electrical, natural gas, and sanitary sewer.

**Section 1505.1 amended – Roof covering requirements.**

The first paragraph of Section 1505.1 is amended to read as follows:

**Section 1505.1 – General**

Roof assemblies shall be divided into the classes defined below. Class A or Class B roof assemblies and roof coverings required to be listed by this section shall be tested in accordance with ASTM E 108 or UL 790. In addition, fire-retardant-treated wood roof coverings shall be tested in accordance

with ASTM D 2898. The minimum roof coverings installed on buildings shall comply with the Table 1505.1 as amended.

**Table 1505.1--Roof Minimum fire retardant classes.**

Table No. 1505.1 is amended to read as follows:

<b>TABLE NO. 1505.1<sup>a</sup></b> <b>MINIMUM ROOF COVERING CLASSIFICATION FOR TYPES OF CONSTRUCTION</b>									
Type	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
Roof Covering	B	B	B	B	B	B	B	B	B

a. Unless otherwise required in accordance with Chapter 7A.

**Section 1505.1.3 amended – Roof covering within all other areas**

Section 1505.1.3 is amended to read as follows:

**Section 1505.1.3 – Roof covering within all other areas**

The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class B.

**Section 3403 Amended – Additions, alterations or repairs – Repairs.**

Section 3403 is amended by adding one new table and sixteen (16) new Subsections.

Subsection 3403.5.1 is added to read as follows:

**3403.5.1 Repairs.** Repairs of structural elements shall comply with this section.

Subsection 3403.5.1.1 is added to read as follows:

**3403.5.1.1 Seismic evaluation and design.** Seismic evaluation and design of an existing building and its components shall be based on the following criteria.

Subsection 3403.5.1.1.1 is added to read as follows:

**3403.5.1.1.1 Evaluation and design procedures.** The seismic evaluation and design shall be based on the procedures specified in the building code, ASCE 31 *Seismic Evaluation of Existing Buildings*

(for evaluation only) or ASCE 41 *Seismic Rehabilitation of Existing Buildings*. The procedures contained in Appendix A of the *International Existing Building Code* shall be permitted to be used as specified in Section 3403.5.1.1.3.

Subsection 3403.5.1.1.2 is added to read as follows:

**3403.5.1.1.2 CBC level seismic forces.** When seismic forces are required to meet the building code level, they shall be one of the following:

1. 100 percent of the values in the building code. The R factor used for analysis in accordance with Chapter 16 of the building code shall be the R factor specified for structural systems classified as “Ordinary” unless it can be demonstrated that the structural system satisfies the proportioning and detailing requirements for systems classified as “Intermediate” or “Special”.
2. Forces corresponding to BSE-1 and BSE-2 Earthquake Hazard Levels defined in ASCE 41. Where ASCE 41 is used, the corresponding performance levels shall be those shown in Table 3403.5.1.1.2.

Table 3403.5.1.1.2 is added to read as follows:

**TABLE 3403.5.1.1.2**

**ASCE 41 and ASCE 31 PERFORMANCE LEVELS**

<b>OCCUPANCY CATEGORY (BASED ON IBC TABLE 1604.5)</b>	<b>PERFORMANCE LEVEL FOR USE WITH ASCE 31 AND WITH ASCE 41  BSE-1 EARTHQUAKE HAZARD LEVEL</b>	<b>PERFORMANCE LEVEL FOR USE WITH ASCE 41 BSE-2 EARTHQUAKE HAZARD LEVEL</b>
I	Life Safety (LS)	Collapse Prevention (CP)
II	Life Safety (LS)	Collapse Prevention (CP)
III	Note (a)	Note (a)
IV	Immediate Occupancy (IO)	Life Safety (LS)

a. Performance Levels for Occupancy Category III shall be taken as halfway between the performance levels specified for Occupancy Category II and Occupancy Category IV.

Subsection 3403.5.1.1.3 is added to read as follows:

**3403.5.1.1.3 Reduced CBC level seismic forces.** When seismic forces are permitted to meet reduced building code levels, they shall be one of the following:

1. 75 percent of the forces prescribed in the building code. The R factor used for analysis in accordance with Chapter 16 of the building code shall be the R factor as specified in Section 3403.5.1.1.2.
2. In accordance with the applicable chapters in Appendix A of the *International Existing Building Code* as specified in Items 2.1 through 2.5 below. Structures or portions of structures that comply with the requirements of the applicable chapter in Appendix A shall be deemed to comply with the requirements for reduced building code force levels.
  - 2.1. The seismic evaluation and design of unreinforced masonry bearing wall buildings in Occupancy Category I or II are permitted to be based on the procedures specified in Appendix Chapter A1.
  - 2.2. Seismic evaluation and design of the wall anchorage system in reinforced concrete and reinforced masonry wall buildings with flexible diaphragms in Occupancy Category I or II are permitted to be based on the procedures specified in Appendix Chapter A2.
  - 2.3. Seismic evaluation and design of cripple walls and sill plate anchorage in residential buildings of light-frame wood construction in Occupancy Category I or II are permitted to be based on the procedures specified in Appendix Chapter A3.
  - 2.4. Seismic evaluation and design of soft, weak, or open-front wall conditions in multiunit residential buildings of wood construction in Occupancy Category I or II are permitted to be based on the procedures specified in Appendix Chapter A4.
  - 2.5. Seismic evaluation and design of concrete buildings and concrete with masonry infill buildings in all Occupancy Categories are permitted to be based on the procedures specified in Appendix Chapter A5.
3. In accordance with ASCE 31 based on the applicable performance level as shown in Table 3403.5.1.1.2.
4. Those associated with the BSE-1 Earthquake Hazard Level defined in ASCE 41 and the performance level as shown in Table 3403.5.1.1.2. Where ASCE 41 is used, the design spectral response acceleration parameters  $S_x$  and  $S_{x1}$  shall not be taken less than 75 percent of the respective design spectral response acceleration parameters  $SDS$  and  $SD1$  defined by the *International Building Code* and its reference standards.

Subsection 3403.5.1.2 is added to read as follows:

**3403.5.1.2 Wind Design.** Wind design of existing buildings shall be based on the procedures specified in the building code.

Subsection 3403.5.2 is added to read as follows:

**3403.5.2 Repairs to damaged buildings.** Repairs to damaged buildings shall comply with this section.

Subsection 3403.5.2.1 is added to read as follows:

**3403.5.2.1 Unsafe conditions.** Regardless of the extent of structural damage, unsafe conditions shall be eliminated.

Subsection 3403.5.2.2 is added to read as follows:

**3403.5.2.2 Substantial structural damage to vertical elements of the lateral–force-resisting system.** A building that has sustained substantial structural damage to the vertical elements of its lateral-force-resisting system shall be evaluated and repaired in accordance with the applicable provisions of Section 3403.5.2.2.1 through 3403.5.2.2.3.

Subsection 3403.5.2.2.1 is added to read as follows:

**3403.5.2.2.1 Evaluation.** The building shall be evaluated by a registered design professional, and the evaluation findings shall be submitted to the building official. The evaluation shall establish whether the damaged building, if repaired to its pre-damage state, would comply with the provisions of the building code. Wind forces for this evaluation shall be those prescribed in the building code. Seismic forces for this evaluation are permitted to be the reduced level seismic forces specified in Code Section 3403.5.1.1.3.

Subsection 3403.5.2.2.2 is added to read as follows:

**3403.5.2.2.2 Extent of repair for compliant buildings.** If the evaluation establishes compliance of the pre-damage building in accordance with Section 3403.5.2.2.1, then repairs shall be permitted that restore the building to its pre-damage state, using materials and strengths that existed prior to the damage.

Subsection 3403.5.2.2.3 is added to read as follows:

**3403.5.2.2.3 Extent of repair for non-compliant buildings.** If the evaluation does not establish compliance of the pre-damage building in accordance with Section 3403.5.2.2.1, then the building shall be rehabilitated to comply with applicable provisions of the building code for load combinations including wind or seismic forces. The wind design level for the repair shall be as required by the building code in effect at the time of original construction unless the damage was caused by wind, in which case the design level shall be as required by the code in effect at the time of original construction or as required by the building code, whichever is greater. Seismic forces for this rehabilitation design shall be those required for the design of the pre-damaged building, but not

less than the reduced level seismic forces specified in Section 3403.5.1.1.3. New structural members and connections required by this rehabilitation design shall comply with the detailing provisions of the building code for new buildings of similar structure, purpose, and location.

Subsection 3403.5.2.3 is added to read as follows:

**3403.5.2.3 Substantial structural damage to vertical load-carrying components.** Vertical load-carrying components that have sustained substantial structural damage shall be rehabilitated to comply with the applicable provisions for dead and live loads in the building code. Undamaged vertical load-carrying components that receive dead or live loads from rehabilitated components shall also be rehabilitated to carry the design loads of the rehabilitation design. New structural members and connections required by this rehabilitation design shall comply with the detailing provisions of the building code for new buildings of similar structure, purpose, and location.

Subsection 3403.5.2.3.1 is added to read as follows:

**3403.5.2.3.1 Lateral force-resisting elements.** Regardless of the level of damage to vertical elements of the lateral force-resisting system, if substantial structural damage to vertical load-carrying components was caused primarily by wind or seismic effects, then the building shall be evaluated in accordance with Section 3403.5.2.2.1 and, if non-compliant, rehabilitated in accordance with Section 3403.5.2.2.3.

Subsection 3403.5.2.4 is added to read as follows:

**3403.5.2.4 Less than substantial structural damage.** For damage less than substantial structural damage, repairs shall be allowed that restore the building to its pre-damage state, using materials and strengths that existed prior to the damage. New structural members and connections used for this repair shall comply with the detailing provisions of the building code for new buildings of similar structure, purpose, and location.

Subsection 3403.5.3 is added to read as follows:

### **3403.5.3 Referenced Standards**

Standard Reference		Referenced In Code
<u>Number</u>	<u>Title</u>	<u>Section Number</u>
ASCE 31-03	Seismic Evaluation of Existing Buildings	3403.5.1.1.1, TABLE 3403.5.1.1.2, 3403.5.1.1.3
ASCE 41-06	Seismic Rehabilitation of Existing Buildings	3403.5.1.1.1,



3403.5.1.1.2,  
TABLE 3403.5.1.1.2,  
3403.5.1.1.3

**Section 3403 amended – Additions, alterations or repairs – Suspended ceiling upgrade.**

Section 3403 is amended by adding a new Subsection 3403.6 to read as follows:

**Section 3403.6 Suspended Ceiling Upgrade.** When an addition, alteration or repair is performed on an occupancy in which there is an existing suspended ceiling, such suspended ceilings shall be modified throughout to comply with the provisions of ASTM C 635 and ASTM C 636.

**Section 7-23—7-30. Reserved.**

**DIVISION 2. MECHANICAL CODE**

**Sec. 7-31. Adopted; exceptions; purpose for exceptions.**

Sec. 7-31-01. Adopted.

The rules, regulations and standards printed in one volume and published by the International Association of Plumbing and Mechanical Officials (IAPMO), under the title "2006 Uniform Mechanical Code" and adopted as the "2007 California Mechanical Code," including the appendices and State of California amendments thereto, hereinafter called "mechanical code," is adopted as and for the rules, regulations and standards within this city as to all matters therein contained, except as otherwise provided in this chapter. The appendices to the mechanical code shall be enforceable to the same extent as if contained in the body of the code.

Sec. 7-31-02 Exceptions is removed.

**Secs. 7-32 through 7-40. Reserved.**

**DIVISION 3. PLUMBING CODE**

**Sec. 7-41. Adopted; exceptions; purpose for exceptions.**

7-41-01. Adopted.

The rules, regulations and standards printed in one volume and published by the International Association of Plumbing and Mechanical Officials (IAPMO), under the title "2006 Uniform Plumbing Code" and adopted as the "2007 California Plumbing Code"

including the appendices A and D, and State of California amendments thereto, hereinafter called "plumbing code," is adopted as and for the rules, regulations and standards within this city as to all matters therein contained, except as otherwise provided in this chapter. The appendices specified herein shall be enforceable to the same extent as if contained in the body of the plumbing code.

Sec. 7-21-02 Exceptions, is replaced in its entirety with the following.

Section 508.4 is amended to read as follows:

**508.4** When a water heater is located where damage may result from a leaking water heater, a watertight pan of corrosion resistant material shall be installed beneath the water heater. The pan shall not be less than three inches (3") in height, nor less than four inches (4") larger in diameter than the water heater and equipped with a three-quarter inch (3/4") drain line that is extended to the exterior of the building and terminated in a downward direction a minimum of 6" and a maximum of 24" above grade.

7-41-03. Purpose for exceptions is removed and replaced with the following:

Where water heaters are located in living areas or when leakage would damage a building or its contents, a requirement that water heaters shall have safety pans with drains is necessary. In the event of a leak the dwelling unit will flood without this safety pan. The City of Belmont is in seismic zone 4, the most active seismic zone, and the City's proximity to known active seismic faults increases the likelihood of water heater failure, particularly those water heaters nearing the end of their serviceable life spans. This amendment also clarifies *Plumbing Code*, Section 508.4 which does not specify the dimensions of the pan required beneath the water heater nor does it specify the termination of the drain line for that pan.

**Sections 7-42 through 7-50 reserved.**

## **DIVISION 4. ELECTRICAL CODE**

**Sec. 7-51. Adopted; exceptions; purpose for exceptions.**

7-51-01. Adopted.

The rules, regulations and standards printed in one volume and published by the National Fire Protection Association (NFPA), under the title "2005 National Electrical Code" with amendments as contained in the "2007 California Electrical Code", including the appendices, are adopted as and for the rules, regulations and standards within this city as to matters therein contained except as provided in this chapter. The mandatory requirements of the appendices to the code shall be enforceable to the same extent as if contained in the body of the code.

Sec. 7-51-02 Exceptions is removed.

**Section 2.** All ordinances or parts of ordinances of the City of Belmont in conflict with this

ordinance are hereby repealed to the extent that they are in conflict.

**Section 3.** In the event that any section or portion of this ordinance shall be determined invalid, such section or portion shall be deemed severable and all other sections or portions hereof shall remain in full force and effect.

**Section 4.** This ordinance, as it pertains to occupancies regulated by the State Housing Law, is determined to be in compliance with Section 17958 et seq. Of the California Health and Safety Code. The amendments made to the codes adopted by the State of California and contained herein are determined to be reasonably necessary, to preserve minimum health, safety and welfare standards because of the unique local geologic, geographic and/or topographic conditions.

**Section 5.** The City Clerk shall cause a copy of this ordinance to be filed with the ***Building Standards Commission***, within thirty (30) days of its final passage.

**Section 6.** This ordinance shall be posted on the bulletin boards at the following three public places in the City of Belmont: 1) City Hall; 2) Post Office; and 3) Former Fire Station No. 1.

**Section 7.** This ordinance shall take effect and be in force not less than thirty (30) days after its adoption.

**Section 8.** An application for a building permit, or any discretionary review approval, received after December 31, 2007 must comply with this Ordinance unless complete plans were submitted to the City of Belmont prior to December 31, 2007.

Introduced this day \_\_\_\_\_ of \_\_\_\_\_, 2007

\* \* \* \* \*

**PASSED AND ADOPTED** as an Ordinance of the City of Belmont at a regular meeting thereof held on the -  
\_\_\_\_\_ day of \_\_\_\_\_.

I hereby certify that the foregoing Ordinance was duly and regularly passed and adopted by the City Council of the City of Belmont at a regular meeting thereof held on October 31, 2007 by the following vote:

AYES, COUNCILMEMBERS: \_\_\_\_\_

NOES, COUNCILMEMBERS: \_\_\_\_\_

ABSTAIN, COUNCILMEMBERS: \_\_\_\_\_

ABSENT, COUNCILMEMBERS: \_\_\_\_\_

\_\_\_\_\_  
MAYOR of the City of Belmont

ATTEST

\_\_\_\_\_  
CLERK of the City of Belmont